



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,417	08/29/2006	Jarmo Kirvesmaki	METSO-66	4324
36528 7590 11/21/2008 STIENNON & STIENNON 612 W. MAIN ST., SUITE 201 P.O. BOX 1667 MADISON, WI 53701-1667			EXAMINER HUG, ERIC J	
			ART UNIT	PAPER NUMBER
			1791	
			MAIL DATE	DELIVERY MODE
			11/21/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/598,417

Applicant(s)

KIRVESMAKI ET AL.

Examiner

Eric Hug

Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20-32 is/are allowed.
- 6) ☒ Claim(s) 14-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/CI/CC)
Paper No(s)/Mail Date 08/29/2006
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruf et al (US 2002/0043355) in view of Gustavsson (WO 01/98582) and "Headbox Flow Sheet Comparison" by Metso Paper, further in view of Shafer (US 5,806,283).

Ruf discloses a lamella (vane) in a headbox of a paper production machine. The lamella is formed of at least one high-performance polymer. The polymer is a water-absorbing polymer. The behavior of the lamella concerning moisture is improved if the high-performance polymer has a moisture acceptance in the range of about 0.05% to about 2%. See paragraph [0017]. Thus, Ruf discloses a headbox vane comprising a water-absorbing plastic and having a desired amount of moisture during operation.

Gustavsson discloses a headbox with a vane made of plastic material. Gustavsson discloses that a plastic vane absorbs moisture from its surrounding while being stored and transported, and also absorbs moisture from the stock when in the headbox. See the paragraph from page 2, line 29 to page 3, line 7.

The Headbox Flow Sheet Comparison by Metso Paper discloses exemplary materials for a headbox vane which encompass the claimed materials. Included are materials known to absorb

water, in some instances requiring storage under wet conditions to reach an equilibrium state prior to use.

The combined teachings of Ruf, Gustavsson, and Metso Paper indicate that headbox vanes are prone to absorbing moisture and that one must store them in a manner rendering them operable in the headbox. Neither reference teaches enclosing the vane in a vapor-proof package, desirably under vacuum. However, it is well known to store a water-absorbing material in a moisture-proof vacuum package prior to use to prevent loss of moisture or to prevent unwanted absorption of moisture. Shafer teaches vacuum packaging of plastic materials, particularly in a storage bag with gas and moisture barrier layers. This is suitable for plastics prone to absorption of moisture. See column 5, line 51 to column 6, line 21. It would have been obvious to one skilled in the art to store a headbox vane as disclosed by Ruf or Gustavsson in a vacuum package with a gas and moisture barrier to maintain the vane at a desired level of moisture or to prevent unwanted absorption of moisture during storage or transport prior to use in the headbox.

It is noted that the term "selected" in the claims does not impart any distinction to the claimed vane assembly. Whether the moisture content of the vane is selected or not selected, the vane has a particular moisture content when stored.

Allowable Subject Matter

Claims 20-32 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not disclose or suggest a method for ensuring the straightness of a vane for a headbox of a paper machine having at least the steps of moistening the vane to a selected moisture content, followed by enclosing the moistened vane in a vapor-proof package. The prior art teaches that headbox vane materials can absorb moisture requiring storage or enclosure of the vane before use, but the prior art does not teach moistening the vane to a selected moisture content prior to storage or enclosure.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bonander (US 6,521,095) discloses exemplary materials for a headbox vane (col. 1).

Erikson et al (US 2003/0131964) also discloses a headbox vane made of a moisture-absorbing plastic material, and teaches that when exposed to stock, the vane becomes saturated with water and swells for a period of time will extending from the moment when the flow of stock starts through the headbox up to the moment when the swelling of the vane is complete. See paragraphs [0049]-[0050].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Hug whose telephone number is (571) 272-1192. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Eric Hug/
Primary Examiner, Art Unit 1791